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Geophysical and Archaeological Investigations for Location of a Historic Cemetery, Fort Stewart, Georgia

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Geophysical and Archaeological Investigations for Location of a Historic Cemetery, Fort Stewart, Georgia

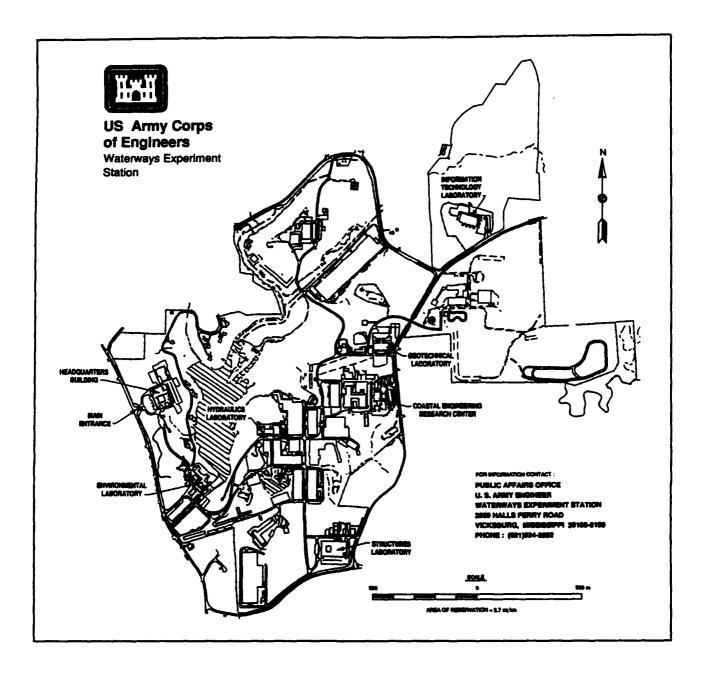
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PREFACE

A geophysical and archaeological investigation of a historic cemetery site on Fort Stewart, Georgia, was authorized by the U.S. Army Engineer District, Savannah (CESAS), under MIPR No. PD-EC 93-02, dated 29 October 1992. The work was performed during the period November-December 1992 by personnel of the U.S. Army Engineer Waterways Experiment Station (WES).

Mr. José L. Llopis and Dr. Dwain K. Butler, Earthquake Engineering and Geosciences Division (EEGD), Geotechnical Laboratory (GL), and Dr. Frederick L. Briuer, Natural Resources Division, Environmental Laboratory, conducted the investigation with the assistance of Mr. Steve Gilbert, Mr. Gary Coleman, and Ms Beverly Waters, CESAS. This work was performed under the general supervision of Mr. Joseph R. Curro, Chief, Engineering Geophysics Branch, EEGD, Dr. Arley G. Franklin, Chief, EEGD, and Dr. William F. Marcuson III, Director, GL.

At the time of publication of this report, Director of WES was Dr. Robert W. Whalin. Commander was COL Leonard G. Hassell, EN.

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CONVERSION FACTOR, NON-SI TO SI (METRIC) UNITS OF MEASUREMENT

Non-SI units of measurement used in this report can be converted to SI (metric) units as follows:

Multiply	By	To Obtain
acres	4,046.873	square metres
feet	0.3048	metres
gamma	1.0	nanotesla
millimhos per foot	3.28	millimhos per metre
millimhos per foot	3.28	milliSiemens per metre

GEOPHYSICAL AND ARCHAEOLOGICAL INVESTIGATIONS FOR LOCATION OF AN HISTORIC CEMETERY, FORT STEWART, GEORGIA

Background

A private citizen has expressed interest in locating a historic cemetery (Durrence Cemetery) on Fort Stewart property, where his grandfather and other relatives are buried. Examination of historical documents, maps, and aerial photos confirms the existence of the cemetery and localizes the area of the cemetery. Fort Stewart personnel have identified and marked an area approximately 45 x 80 ft in size as the likely location of the cemetery. The cemetery was used during the approximate period 1808-1880 and reportedly contains 10-12 graves. Fort Stewart personnel desired to non-invasively confirm the existence of graves in the identified area; the area will then presumably be fenced, maintained and made available to descendants for visitation. The US Army Engineer District, Savannah, requested assistance from the US Army Engineer Waterways Experiment Station (WES) to verify the existence of the grave sites at the identified area.

The area is relatively flat and covered by grass and trees. The surface material is predominantly sand, which is underlain by clay at an undetermined depth. There is evidence of wheeled and tracked vehicle traffic at the site. Past vehicle traffic has accelerated erosion, and the soil cover has been removed. Evidence of military use of the site consisted of some spent shell casings, meal ration pouches (some with foil lining), and a large roll of wire; when discovered, these items were removed from the site to avoid effects on the geophysical survey data.

Approach and Scope of Work

The work began with a review of all available historical documents, aerial photos, and maps that were used to identify the candidate area for the cemetery. On-site work included an archaeological survey of the area and interviews and a walking tour with two descendants of the original owners of the cemetery and surrounding property.

Application of geophysical surveying methods for the location of historic graves is based primarily on the fact that the subsurface disturbance created by the grave excavation process can persist for centuries under certain conditions. disturbance consists of both alteration of sediment texture/ structure relative to surrounding material and interruption of soil or other depositional horizons. Secondarily, many burials may be associated with metallic or other cultural artifacts which can persist for centuries. Due to the age of the graves at Fort Stewart and location in a temperate (i.e., not arid) environment, most iron (ferrous) objects likely to have been associated with burials of this type will have thoroughly oxidized (rusted), however the presence of iron objects cannot be ruled out. presence of iron and other metallic objects will create magnetic and/or electrical conductivity anomalies. Some burned or baked stone or brick objects can also create magnetic anomalies. Only for recent burials will the actual human remains and burial coffin/box be likely to contribute to geophysical anomalies. For the case of a cemetery, some type of order and alignment can exist which may aid in detection and mapping.

Three geophysical methods are generally used in programs for grave location: ground penetrating radar (GPR), electrical and electromagnetic (EM) surveys, and magnetic surveys. WES personnel conducted these type surveys over an area 100 ft by 120 ft approximately centered on the smaller area marked by District personnel. The geophysical survey area was flagged on a 10 ft

grid interval. The geophysical survey area and the smaller, marked area, illustrated in Figure 1, are aligned only approximately north-south and east-west; but for convenience, coordinates East and North of a (0,0) reference point of the grid will be used.

Total magnetic field measurements were acquired at 10 ft intervals over the complete grid with a proton precession magnetometer. The magnetometer indicates magnetic field strength in nanoteslas (nT) and is accurate to 1 Nt; the normal earth's magnetic field strength is approximately 51,000 Nt at Fort Stewart. The purpose of the magnetic survey was to detect the presence of buried ferrous metallic objects, associated with grave burials or otherwise. Magnetic anomalies can be correlated with electromagnetic anomalies to help discriminate between subsurface objects/features (1) which are metallic and electrically conductive and (2) which are non-metallic and electrically conductive.

Two electromagnetic survey instruments were applied at the site. The EM-31 is an electromagnetic instrument with a depth of investigation of approximately 20 ft; measurements were obtained on the 10 ft grid throughout the survey area (143 measurements). Measurements with the EM-31 are in electrical conductivity units, The EM-38 is an electromagnetic instrument with a depth of investigation of approximately 5 ft; measurements were obtained on a 5 ft grid throughout the survey area (measurement points between the 10 ft grid of flags were located visually relative to the surrounding flags). At each 5 ft grid point, two measurements were obtained: (1) electrical conductivity in mmho/m; (2) an "in-phase component" which is sensitive to the presence of shallow metallic objects in ppt or parts per thousand (1050 measurements). The purpose of the electromagnetic measurements was to map soil conductivity variations and anomalies, indicative of disturbed near-surface sediments and/or anomalous water content associated with grave excavations.

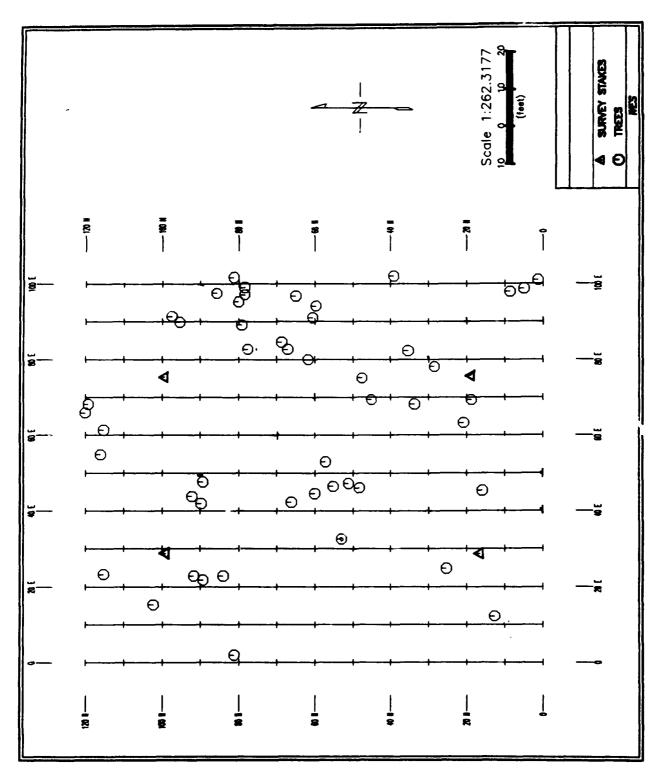


Figure 1. Geophysical survey area, locations of trees, and corners of suspected cemetery location

GPR surveys were conducted along 13 east-west lines and 2 north-south lines, however the data for the 2 north-south lines was lost due to equipment malfunction. GPR data is recorded continuously along the survey lines. GPR is an electromagnetic method that produces a graphic record of surface distance versus two-way travel time for electromagnetic waves in the subsurface. The travel time axis can be related to depth in the subsurface. The GPR record in some ways resembles a "snapshot" of the subsurface, but images in time do not always exactly resemble the images in depth. GPR signals are reflected off interfaces between different materials, regions with different water contents, and regions with different electrical conductivities. A near-horizontal interface, for example, will appear as a near horizontal line or event on the GPR record. A small, localized object, such as a buried metallic object will appear as a hyperbolic-shaped event centered on the object's location. Graves are visible on GPR records due to interruption of soil and depositional horizons, different electrical conductivity of the disturbed material in the grave relative to surrounding material, and reflection from artifacts in the grave.

Archaeological Survey

Results of the archaeological survey of the cemetery site and surrounding area, including the suspected homestead site, are detailed in Appendix A. Included in Appendix A are an Archaeological Site Survey Form, a Synopsis of Taped Interview with Informants, and an early aerial photograph of the site. Figure 2 summarizes the information obtained from inspection of available data in the form of maps and aerial photographs, the site survey, and discussions with informants. The conclusion of the material in the Appendix is that physical, archaeological, and historical evidence supports the fact that the cemetery location as marked by District personnel is correct (Figure 2).

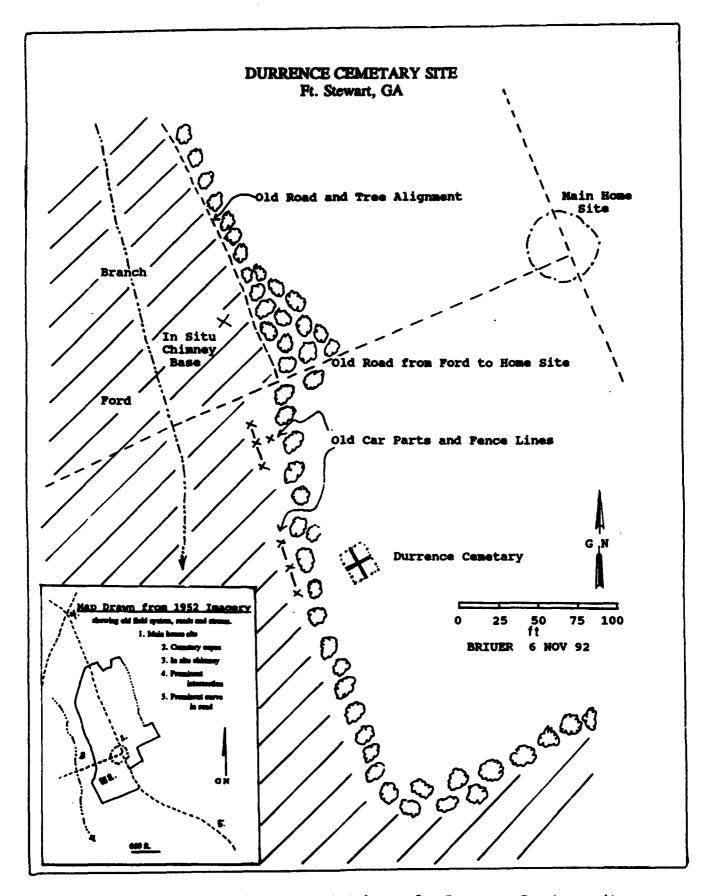


Figure 2. Location and feature sketch map for Durrence Cemetary site

The marked cemetery location in Figure 2 is consistent with the cemetery location as remembered by both informants. The recollections of the informants date from the mid- to late-1920's. One informant recalls seeing no grave markers or fencing around the cemetery, but does recall a brick border about one foot high around one grave. The second informant recalls the cemetery being about 70-80 ft square with a few badly deteriorated wooden grave markers; he also recalled one grave with a collapsing brick vault. There were likely 10-12 graves in the cemetery, and the graves probably were oriented east-west.

Geophysical Survey Results

Magnetic Survey. The results of the magnetic survey are shown in Figure 3. In Figures 3-6, the 'a.' part is a black and white contour map (used for establishing anomaly locations and quantitative interpretations is warranted), while the 'b.' part is a color-coded contour map (useful for highlighting anomalies and better visualization of areal variations). The details of the 'a.' and 'b.' parts of each figure differ slightly due to different contouring procedures. The total magnetic variation over the site is less than 100 nT. The only well-defined anomaly is caused by a feature located at (30E,60N) and at an apparent depth of approximately 10 ft or less. The remainder of the magnetic variations are quite small and could be caused by random, scattered ferrous metallic objects.

EM-31 Survey. A soil conductivity map resulting from the EM-31 survey is given in Figure 4. The conductivity values are volume-averages to a depth of approximately 20 ft. Conductivity variation over the site is quite small, varying from 16 mmho/m in the south to 19 mmho/m in the north. The increase in conductivity from south to north over the survey area can possibly be explained by (1) increasing clay content in the sand or (2) decreasing depth to the clay. There are no significant isolated anomalies.

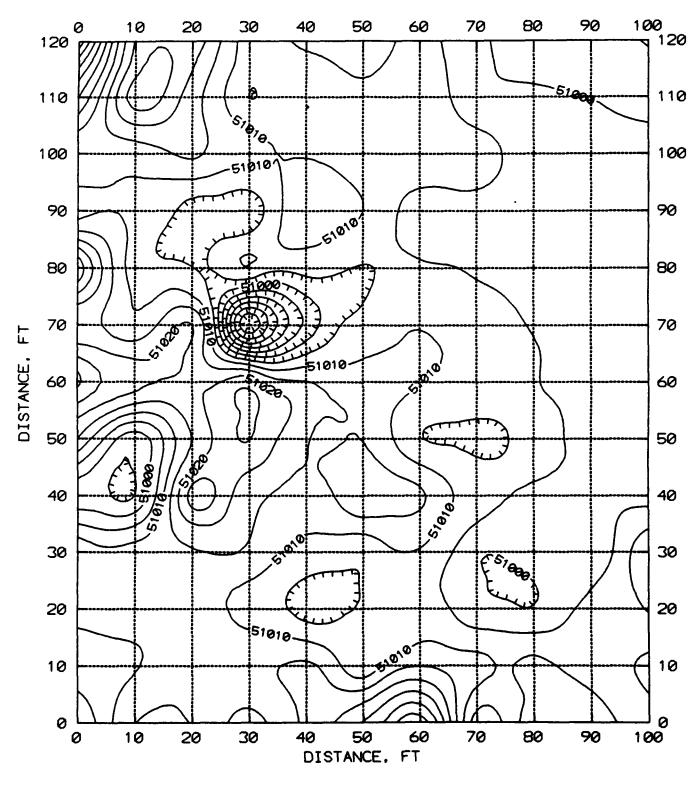


Figure 3a. Total magnetic field contour map.

Contour Interval = 5 nt

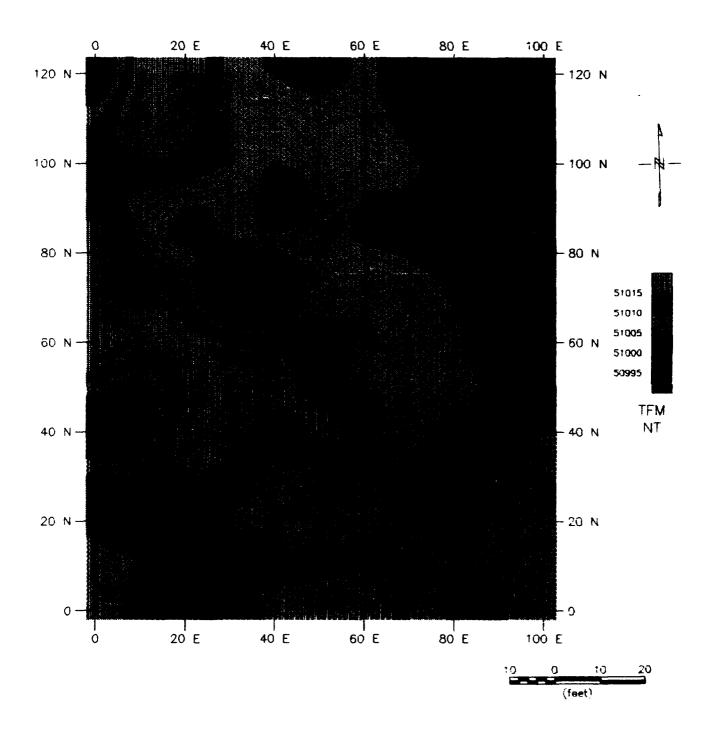


Figure 3b. Total magnetic field color-coded contour map

Contour Interval = 1 nt

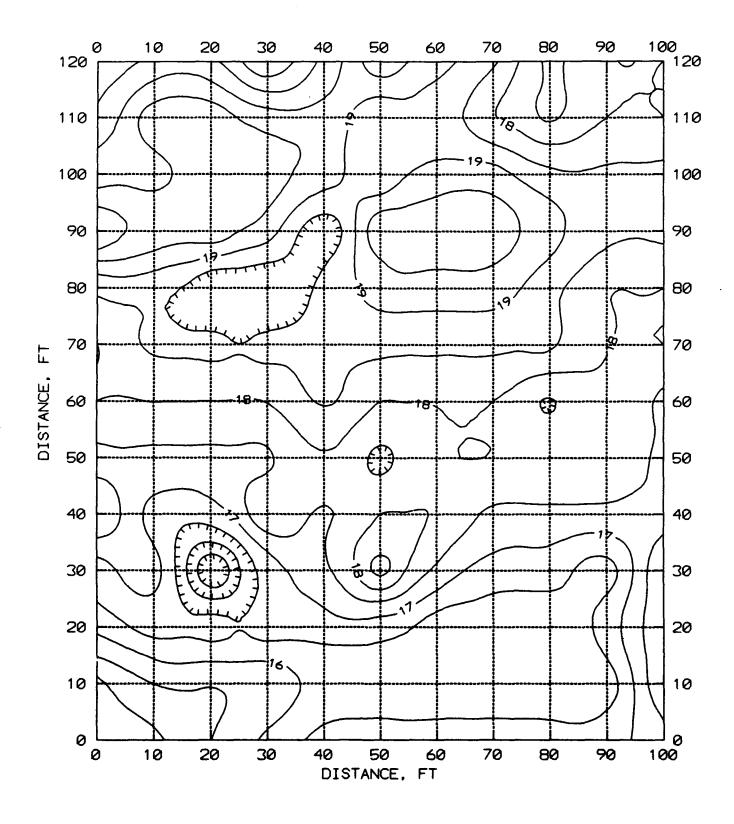


Figure 4a. EM-31 electrical conductivity contour map. Contour Interval = 0.5 mmho/m

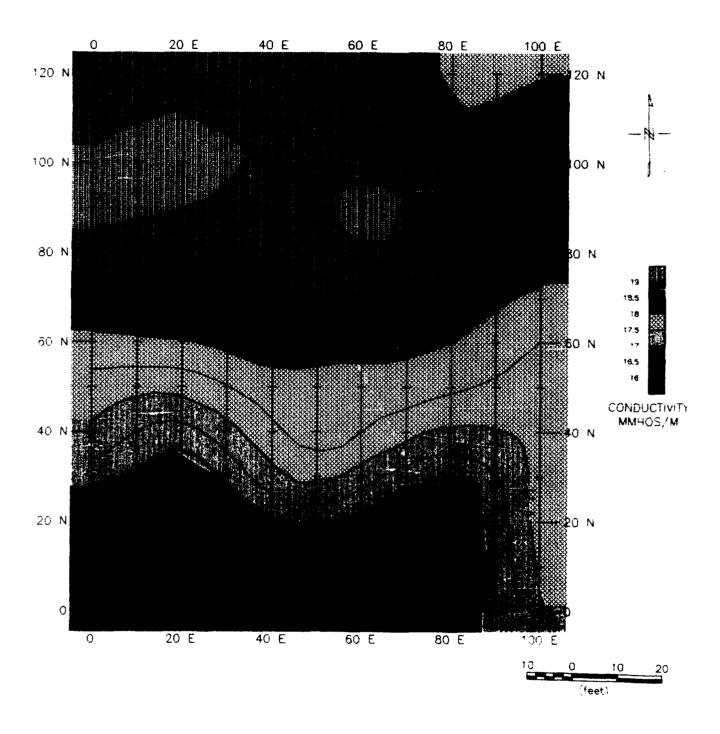


Figure 4b. EM-31 electrical conductivity color-coded contour map

Contour Interval = 0.25 mmho/m

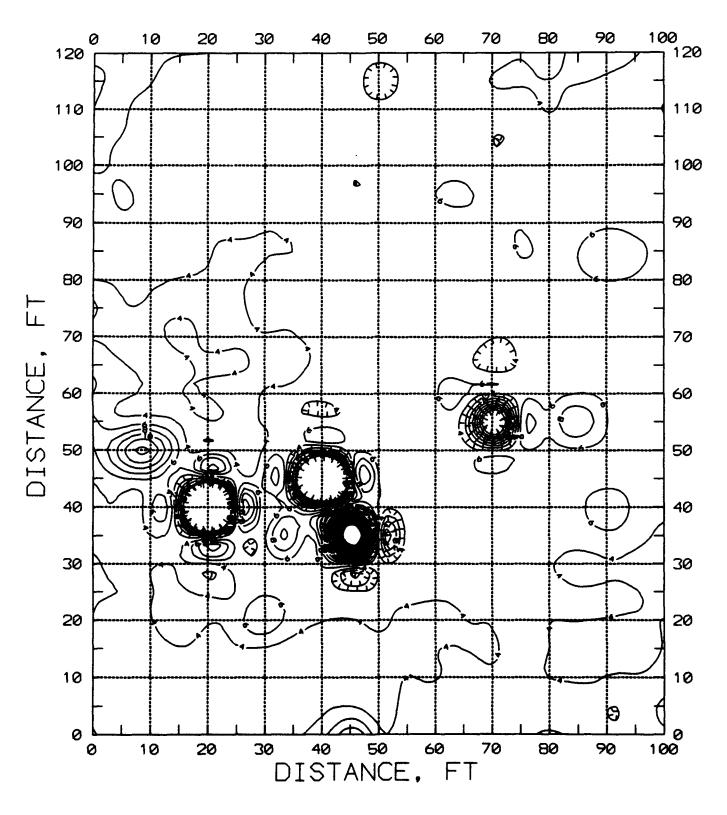


Figure 5a. EM-38 electrical conductivity contour map. Contour Interval = 2 mmho/m

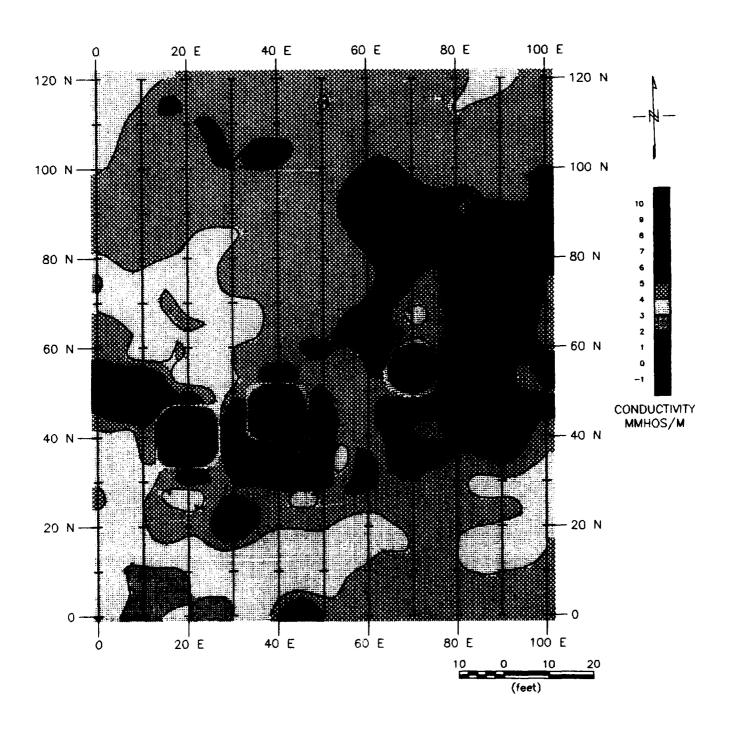


Figure 5b. EM-38 electrical conductivity color-coded contour map

Contour Interval = 1 mmho/m

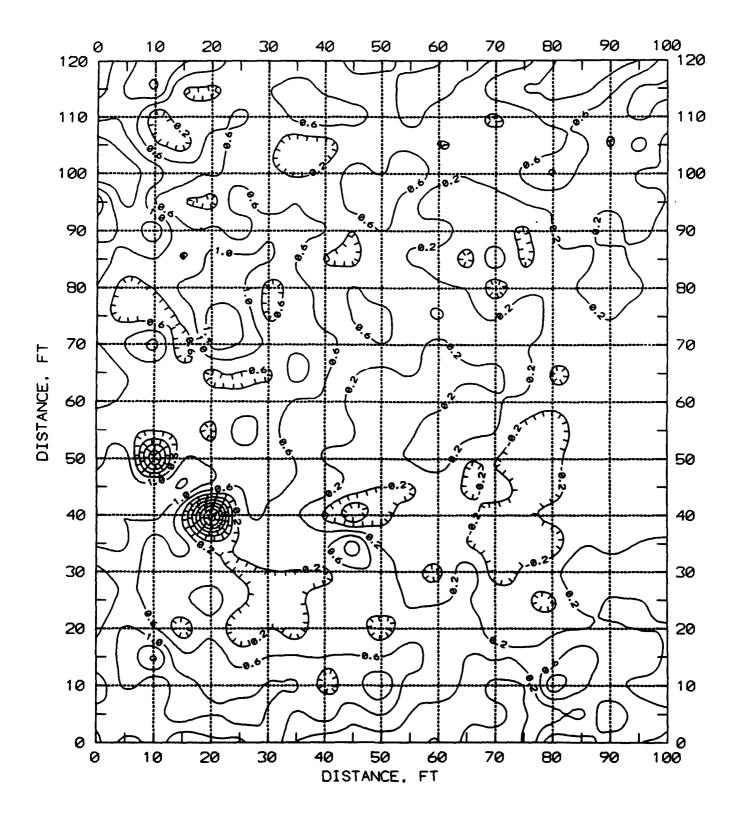


Figure 6a. EM-38 in-phase reading contour map Contour interval = 0.4 ppt

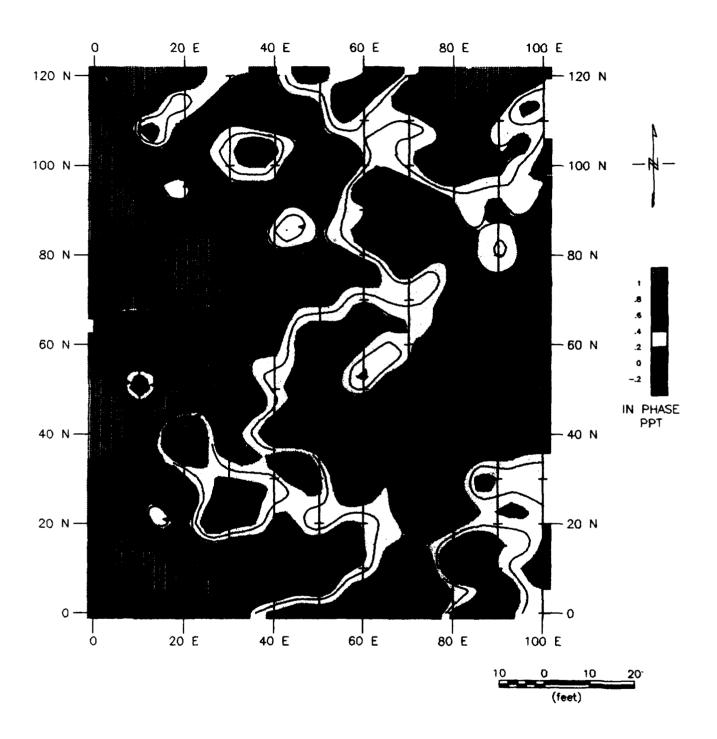


Figure 6b. EM-38 in-phase reading color-coded contour map

Contour Interval = 0.1 ppt

EM-38 Survey. Results of the EM-38 survey are presented in Figures 5 and 6. The electrical conductivity values (Figure 5) are volume-averages in the soil to a depth of approximately 5 ft. The conductivity values are very low, typical of clean sand, and exhibit no trend over the survey area. Several isolated anomalies exist at (10E,50N), (20E,40N), (40E,45N), (45E,35N), and (70E,55N). The in-phase readings (Figure 6) exhibit no trend over the survey area and only two significant localized anomalies, at (10E,50N) and (20E,40N). The two localized inphase anomalies correspond to localized conductivity anomalies and are interpreted to be caused by metallic objects (shell casings were found near (10E,50N) and a foil-lined ration pouch was found at (20E, 40N)). There are small in-phase anomalies in the vicinity of the conductivity anomalies at (40E,45N) and There is no indication of an in-phase anomaly corresponding to the anomalous conductivity area centered at (70E,55N). The fact that the EM-38 data do not indicate an anomaly at (30E, 60N), location of the magnetic anomaly, suggests that the feature there is greater than 5 ft in depth.

GPR Survey. The GPR records were examined by two interpreters independently for identification of anomalies. procedure was followed since there is some degree of subjectivity in the interpretation of GPR records for the type anomaly sought in this study. A typical GPR record is shown in Figure 7, with anomalies indicated. GPR anomaly locations are indicated on Figure 8, where anomalies identified by one interpreter are shown as solid boxes, while anomalies identified by the other interpreter are shown as open boxes. Significantly there is considerable agreement between the two interpreters. Note that one interpreter identified two or three small, closely spaced anomalies in areas that the other interpreter grouped together as one anomalous area. While many of the anomalies appear to extend to the surface, others are at interpreted depths from 0.5 ft to 2.5 ft. The selected anomalies have signatures or features which could be caused by graves; however, there are other features

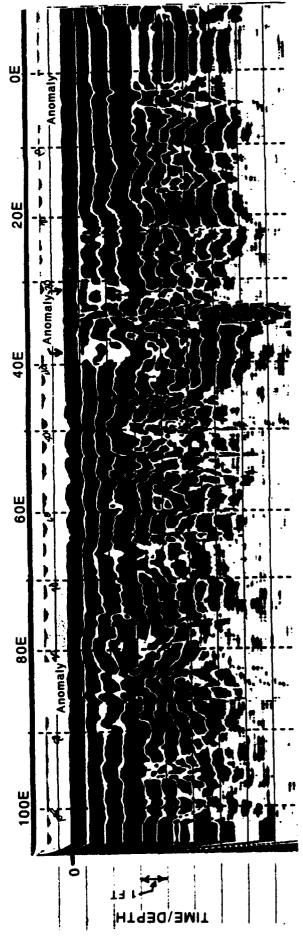


Figure 7. Typical ground penetrating radar (GPR) record, along the 60N line

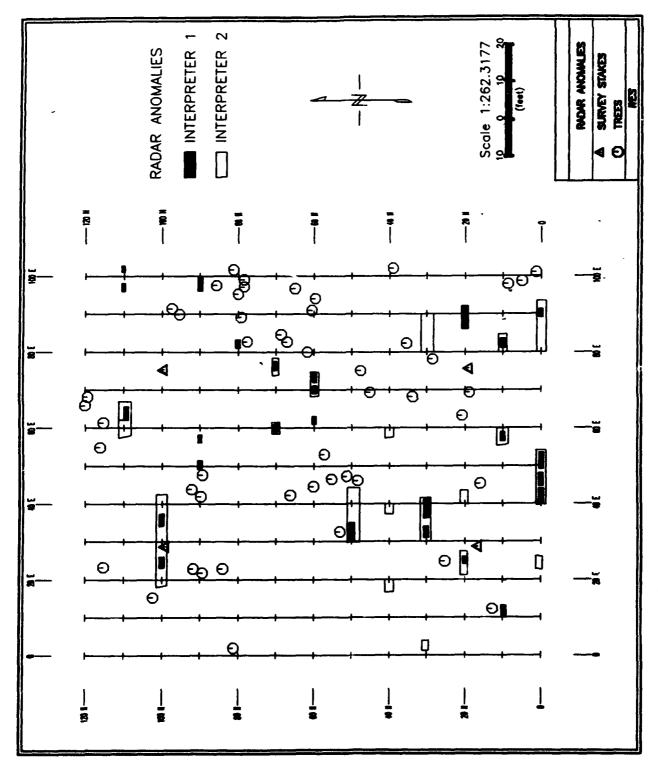


Figure 8. Locations of interpreted GPR anomalies

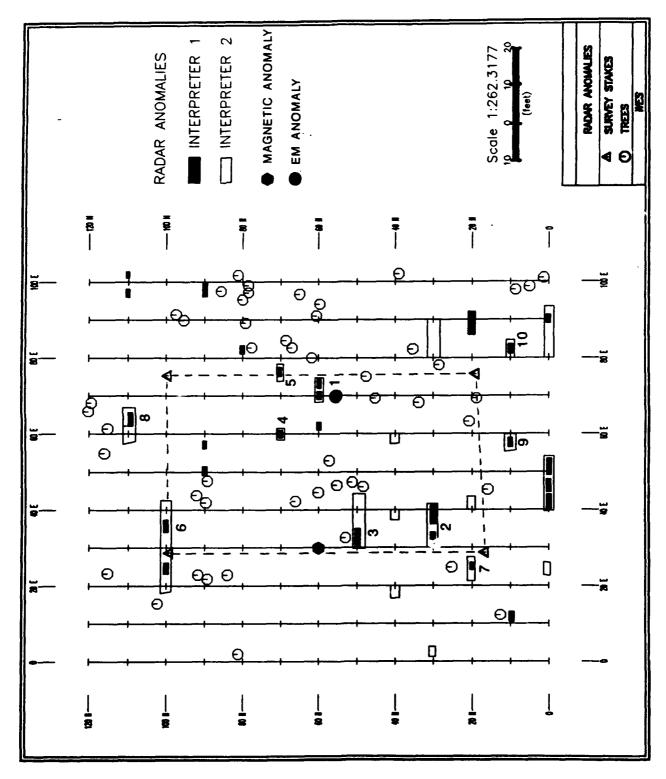


Figure 9. Integrated geophysical anomaly location map

which could produce such features, e.g., large tree roots, GPR reflections off nearby trees, or compacted zones caused by wheeled/tracked vehicles which have been subsequently buried.

Integrated Methods Assessment. As discussed above, most of the isolated EM anomalies are attributed to small, surface metallic objects. One magnetic and one EM anomaly cannot be explained by known features; these are shown on Figure 9 along with the GPR anomalies. The magnetic anomaly is isolated, however the EM anomaly is quite close to a GPR anomaly identified by both interpreters. The EM anomaly and associated GPR anomaly (anomaly 1 in Figure 9) are within the cemetery area marked by District personnel; the magnetic anomaly is also within the In addition to the EM/GPR anomaly just mentioned, there are eleven GPR anomalies within the marked (staked) area, of which five were identified by both GPR interpreters (anomalies 2-6 in Figure 9). In the survey area surrounding the marked cemetery area, there are sixteen GPR anomalies (six were identified by both GPR interpreters). In terms of a confidence ranking criteria, three factors should be considered: (1) spatial correlation of anomalies from different geophysical methods; (2) nature of the anomalies consistent with that expected for a grave (burial), (3) GPR anomalies identified by both independent interpreters; (4) location of the anomalies within or immediately adjacent to the cemetery area marked by District personnel.

Conclusions

Inspection of historical maps and aerial photographs, real estate surveys and records, archaeological survey, and interviews with eye-witness informants support the validity of the cemetery location (Durrence Cemetery) as marked by Savannah District personnel. Geophysical surveys were conducted to confirm the existence of graves within and immediately adjacent to the marked cemetery location. Results of the geophysical surveys indicate the existence of subsurface anomalous features, within and

immediately adjacent to the marked cemetery location, consistent with the reported number of graves in the cemetery, i.e., 10-12. There are 10 geophysical anomalies within or immediately adjacent to (within 10 ft) the marked cemetery location that satisfy the four confidence ranking criteria listed above (anomalies 1-10 in Figure 9). Other geophysical anomalies exist within the survey area which do not satisfy all the four criteria. While the ten geophysical anomalies are consistent in nature and number with the expected burials in the cemetery, there are other subsurface conditions which could cause the anomalies. However, the convergence of diverse types of evidence supports a recommendation to recognize the site as the "Durrence Cemetery."

APPENDIX A

- a. Archaeological Site Survey Form
- b. Synopsis of Taped Interviews with Informants
- c. Aerial Photograph (2/8/52) Showing Location of Durrence Cemetery

WATERWAYS EXPERIMENT STATION ARCHAEOLOGICAL SITE SURVEY FORM

Fort Stewart, Georgia

- 1. Site No. Other No. (No. 's)
- 2. Site Name (s) Durrence Homestead and Cemetery
- 3. USGS Ouad Name Glisson Millpond Date 1958 Scale- 7.5 min
- 4. Real Estate Map Confirmed yes [X] no
- 5. <u>B/W air photo</u> GA. S.C.D-18 Ogeechee River (1952) <u>frame No.</u> CDT- 7K- 15 <u>Other air photos</u> no [] yes [X] SCS 9X9 inch (1968) CDT-IJJ-56 and (1957) CDT-68-8
- 6. Date of Field Recording 6 November 1992
- 7. <u>UTM Center point</u> Grid Zone 17 / E 424240E N 3550310
- 8. Elevation (amsl) at estimated center point 140 ft. Lowest elevation on site 120 ft. Highest elevation 145 ft.
- 9. Current estimate of site area 40,000 sq.m (200m X 200m)
- 10. PREHISTORIC SITE OBSERVATIONS None
- 11. <u>Site Type:</u> Cemetery [X] Domestic Dwelling [X] Dump [] Town [] Farm / Ranch [X] Isolated Features [X] Special Purpose Site [] Other [] Specify
- 13. Ethnic Affiliation: Anglo-American [X] French [] Spanish [] unknown [] Indian [] Other Specify
- 14. How # 13 was determined Interviews with lineal descendants
- 15. <u>Historic Chronology:</u> unknown [] pre-1800 [] 1800-1830 [X] 1830-1859 [X] 1860-1889 [X] 1890-1929 [X] 1930-1950
- [X] 1800-1900 [X] 1800-present [] 1900-present []
- 16. How was # 25 determined Interviews with lineal descendants, family history research, chronological indications of temporally sensitive artifacts, US Army Real Property maps / records.
- 17. Artifact Density: High [] Medium [] Low [X]
- 18. Material Collected no [] yes [X] (itemize)
 Brick and brick fragment, ceramic fragments (blue flow, green and brown annular, white hotel ware) glass fragments (green, clear)

19. Structures no [] yes [X] Specify
Two house sites, chimney fall at one house site with a portion of the chimney base in situ. Based on the recollections of informants Mr. George T. Durrence and Mr. Hugh Glisson there were about ten or so buildings altogether including cow barn, horse barn, cotton shed, hog sheds, two log cribs, buggy shelter, and other outbuildings. These buildings were located on both sides of the road.

20. Features no [] yes [X] Specify

Scatter of historic artifacts (ceramics and glass), hog wire/barbed wire fences and posts, isolated car parts (broken axle, running board), old road and tree alignments.

21. Artifacts observed:

Coarse earthenware, undecorated whitewares, decorated whitewares, porcelain, bottle glass, kerosene lamp parts, car parts, brick, mortar, barbed and hog wire, battery core.

SITE CONDITION OBSERVATIONS

22. Major Land Uses

Cultivated Field [] Pasture [] Woods [X] Forest [] inundated [] roads / trails [X] fire break [X] excavation / logging [] commercial[] recreation[] earthwork [X] residential [] industrial [] scrub / secondary growth / old field [X] modern dump [] Other [X] Specify Other:
Military training impacts including track and wheeled vehicle damage, excavations (fighting holes, trenches, tank traps, staging areas, landing zone)

23. Agents of Impact: Estimate of the % of the Site Surface Area Affected

Sheet erosion and gully [40%], military training [35%]

24. Photos: Roll # 1,2 Exposure (s) # 1 to 24 and 1 to 24

Color [X] B / W []

25 Comments and Recommendations:

It is recommended that the above site form be submitted to the appropriate agency in the state of Georgia for maintaining archaeological site records and assigning Smithsonian trinomial numbers for sites surveyed on Army lands. It is also recommended that a copy of the documentation regarding this site be maintained by the Directorate of Engineering and Housing as a tool for the future management and maintenance of the cemetery.

Although no physical evidence of the cemetery can be seen on the surface today, there is ample evidence that the cemetery is in all probability at this particular location. The site was carefully located based on a survey conducted by Mr. Gary Coleman, Real Estate Branch, Savannah District, Corps of Engineers. Mr. Coleman used a transit and a Real Property map to depict the precise location of the cemetery in relation to land parcels as surveyed by the Army at the time of the acquisition of the property.

Two elderly informants (George Durrence and Hugh Glisson) with recollections of the home site and the cemetery graciously volunteered to assist us locate their family cemetery site. Although they were at first quite surprised and somewhat disoriented by the degree of change that has occurred since they last saw the site in the late nineteen twenties, their recollections were nonetheless entirely consistent with the transit survey, as well as the map and aerial photo evidence. They both consistently recall the cemetery being about 250 to 300 yards SSW of the house site in a cleared field and surrounded tightly by a border of oak and cherry trees left standing between the graves and a large open field. This conforms very well to the earliest air photos depicting the old road patterns in relation to the house site and the above described open field and rectangular enclosure of trees large enough to circumscribe the purported 10 or 12 graves contained within that stand of trees. There are no other features in the air photography that conform to this particular description and conjunction of evidence.

It is recommended that the area of the cemetery be fenced, signed and put on the Installation mowing schedule. A sign designating the area as the "Durrence Cemetery" and "off limits by order of the Commanding General" is recommended. Because of the absence of headstones and the uncertainty of the exact location of the graves, it is recommended that the fence include a buffer zone of about five yards beyond the area flagged on the ground to further assure that future earth disturbing activities in this area will not impact burials contained in this cemetery.

Recorded by Frederick L. Briuer

Date Nov. 16,1992

Synopsis of Taped Interview with Informants

On 4 November 1992 Mr. Steve Gilbert archaeologist and Mr. Gary Coleman realty specialist also with the Savannah District Corps of Engineers and myself met with two elderly residents of Claxton, Georgia who both had familiarity with the Durrence cemetery. Mr. George T. Durrence (age 86) and his cousin Mr. Hugh T. Glisson (age 76) were related to Mr. and Mrs. Hartridge Jerome Durrence last owners prior to the Army's acquisition of the property where the cemetery is located. Both informants were lucid and articulate about their recollections of the Durrence home place and cemetery and expressed a great interest in helping us investigate the site. The information provided by both informants conforms very well to the transit survey and air photo evidence for locating the site. In my view, the veracity, reliability and consistency of these informants indicates that they were excellent, highly credible sources of information about the cemetery. The following is a summary of the most important points extracted form the taped conversations.

Mr. George T. Durrence

As George Durrence remembers it, the people who owned and resided at the home site were a great uncle Hartridge Jerome Durrence and his wife Macy Ann. H.J. Durrence was a brother of George's grandfather Durrence). H.J. Durrence bought the place well before the turn of the century from William Durrence a brother of George's great grandfather. This was another distantly related Durrence family. Record of this land transaction should be on file in Ridgeville, Tattnall County. This land transaction occurred well before the formation of Evans county in about 1914.

H.J. Durrence died in his early thirties from the kick of a mule. Macy Ann Durrence now a widow with eight children survived her husband and stayed on at the old home site until her death just one year before the acquisition in 1942. George recalls visiting her several times before the acquisition but last remembers visiting the cemetery in the late nineteen twenties when he was in his early twenties.

George described the cemetery as being about 300 yards southwest of the old home place. The old home place was surrounded by open fields. George recalled seeing no headstones or fencing around the cemetery. He does not remember a brick gateway or brick gate posts but does recall brick about one foot high around one grave. He recalled about ten or at most twelve graves. The direct descendants of the Durrence family interred there had long since moved away after selling out to H.J. Durrence. He thinks the graves dated from the early eighteen

hundreds to about 1880. Based on his personal family history research and the recollections of older family members, he thinks the following people are among the small burial population interred at the cemetery:

William Durrence born about 1755, died in 1808
Elizabeth Williams Durrence born about 1755 died after 1820
William W. Durrence born 1850 died (?)
Cynthia Tiffens Durrence born 1887 (?) died after 1860 (?)
John Underwood Durrence born 1813 died 5/6/1867
Josephine Purcell born 1836 died (?)
William W. Durrence III born 1804 died 3/8/1841
Laurania DeLoad (?) born 1807 died after 1875
Sarah Matilda Durrence born 1803 died between 1860 and 1870
Joseph W. Smith drowned 2/8/185?
Mrs. Smith (daughter of William Durrence) dates unknown

Mr. Hugh T. Glisson

Mr. Glisson, a grandson of H.J. Durrence, recalls the cemetery in about 1927 or 1928 being about 70 or 80 feet square and grown up with oak and cherry trees but no pine. Cemetery and copse were in the middle of a large cultivated field about 250 to 300 yards southwest of the main house site. Hugh recalls a few (perhaps 5 to 7) badly deteriorated and weathered wooden grave markers (crosses) without inscriptions probably at least a hundred years old at that time. He also recalled vestiges of a dilapidated wooden or rail (not wire) fence. He thought that the headboards had probably been damaged and pushed over by livestock.

Hugh also did not recall brick gate posts but did recall a rectangular box-like brick structure about four ft. wide and 3 1/2 ft. high with a flat top. The vault was made of homemade, oversized reddish bricks and mortar. This vault he thinks contained the skeleton of Mrs. Smith, wife of Joseph W. Smith buried nearby. The vault was damaged, in very bad condition and partially open to the elements. Hugh said he could see the post cranial skeleton and cranium of what was thought to be a woman because there appeared to be remnants of hair underneath the skull. The skeleton was laid out east/west, with the feet pointing east and head pointing west, so that if the skeleton were to sit up it would be facing east. Outside of the east/west alignment there was no particular system or pattern to the graves.

Mr. Glisson upon arrival at the site got out of the vehicle, hiked around and oriented himself by reference to the old road that ran NE/SW from the main house site across the south flowing branch and then west to the old Mobley place. This old road is still discernible today especially on the west side of the branch. Mr. Glisson said there was once a saw mill owned and

operated by his father and another man at the head of this branch. Sometime in the Twenties a boiler exploded at the saw mill killing one man and scalding another. We walked the old road south of the saw mill and saw evidence of the old field system and fences. Following the old road to where the house would have been located we found a scatter of typical domestic artifacts (see site forms \$18 and \$21). Once at the main house site Mr. Glisson pointed out where he remembered the cemetery to be located. This was exactly where Mr. Coleman had independently located the cemetery on the basis of his transit survey using real property maps and early air photography.





Figure A1. Durrence Cemetery location (arrow). 1952 aerial photograph

REPORT DOCUMENTATION PAGE

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An investigation to locate a historic cemetery on Fort Stewart, Georgia, is reported. The cemetery was used during the period 1808-1880 and reportedly contains 10-12 graves. Historical records, maps, and aerial photographs allowed the likely cemetery site to be localized; however, since there are currently no surface indications of the cemetery, geophysical and additional archae-ological surveys were conducted to validate the site. Archaeological investigations included a site survey and interviews with descendants of the owners of the cemetery property. Geophysical investigations included magnetometer, electromagnetic (two systems), and ground penetrating radar surveys of an area centered on the localized, likely cemetery site. Results of the						

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geophysical surveys indicate the existence of subsurface anomalous features, within and immediately adjacent to the likely cemetery location, consistent with the number of reported graves in the cemetery. The convergence of diverse types of information supports a recommendation to recognize the site as the

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